

PATENT CLAIMS

1. A process for producing a turbine blade or vane, in which process a casting (10, 10', 10''), which is in the basic shape of the turbine blade or vane, is produced in a casting mold, and then, to complete the turbine blade or vane, the casting (10, 10', 10'') is subjected to material-removing machining, characterized in that a leading-edge angle of the turbine blade or vane which is altered in order to optimize the turbine is achieved by changing the machining of the casting (10, 10', 10'') while retaining the same casting mold.

2. The process as claimed in claim 1, characterized in that the casting (10, 10', 10'') is held in a holder during the machining, and in that the casting (10, 10', 10'') is rotated in the holder for the purpose of changing the machining, with the reference points required for the machining being repositioned.

20

3. The process as claimed in claim 1, characterized in that the casting (10, 10', 10'') is held in a holder during the machining, and in that the casting (10, 10', 10'') is rotated together with the holder for the purpose of changing the machining, the correctly calculated distances being used to reach the desired position.

4. The process as claimed in one of claims 1 to 3, characterized in that an additional machining stock (14, 14', 14'') is provided on the casting (10, 10', 10'') for the material-removing machining, and in that the thickness of the additional machining stock (14, 14', 14'') is selected to be sufficiently above a minimum value for it to be possible for a turbine blade or vane which has a leading-edge angle which can be selected freely within a predetermined range of angles to be produced by machining from the same casting (10,

10', 10'').

5. The process as claimed in claim 4, characterized in that the casting (10, 10', 10'') or the turbine
5 blade or vane has a blade or vane platform (11) and a main blade or vane part (12), and in that the additional machining stock (14', 14'') above the minimum value is provided on the blade or vane platform (11).

10

6. The process as claimed in one of claims 4 or 5, characterized in that the minimum value for the additional machining stock is approximately 2 mm, and in that the additional machining stock (14', 14'')
15 above the minimum value amounts to a total of about 5 mm.